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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,573	01/24/2002	Te-Yu Liang	SUND 268	3441

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EXAMINER

PATEL, ANAND B

ART UNIT	PAPER NUMBER
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2116

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/053,573	LIANG, TE-YU	
	Examiner	Art Unit	
	Anand Patel	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6161175 to Kim et al (Kim) in view of US Patent No 6799278 to Khatri et al (Khatri).

- As per claim 1, Kim discloses a method for adjusting the external clock of a central processing unit (column 8, lines 20-22), the CPU being employed in a computer system (abstract, line 1), the computer system at least comprising an external-clock storage device (50), the method comprising steps of:
 - Setting an external-clock value and storing the external-clock value into the external-clock storage device (column 8, lines 20-27, lines 35-39)
 - Starting an external-clock altering procedure (figure 11, "Save Change & Exit) and turning off the computer system (column 8, lines 40-42)
 - Starting a wake-up circuit as the computer system is being turned off (column 8, lines 41-43; It would be inherent that a circuit is needed to wake-up the system on a restart or a boot.);
 - Providing the central processing unit with the external clock according to the external-clock value stored in the external-clock storage device (column 8, lines 40-46).

Kim fails to disclose a system wherein explicit mention is made to the south bridge circuit and its powering on the computer system after it has been powered up. Khatri teaches:

- After the turning off of the computer system, waking up the south bridge circuit in a wake-up time by feeding a wake-up signal from the wake-up circuit into the south bridge circuit (column 1, lines 35-41);
- Rebooting the computer system by the south bridge circuit responsive to the wake-up signal (column 1, lines 35-41).

The ability to remotely access a computer system that has been powered down is an advantage of this teaching (column 1, lines 26-28). Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Kim and Khatri to be able to use the south bridge circuit as a primary power on device as called for in the Khatri patent. The motivation to combine is the ability to remotely access powered down computer systems.

- As per claims 2-3, Kim discloses that the method is performed by a computer system but does not specify what type of computer system. The examiner takes Official Notice that notebook computers and desktop computers are well-known types of computer system. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention to use a notebook computer or a desktop computer for the computer system disclosed by Kim.
- As per claim 4, Khatri does not address the exact wake-up time length. However, a wake-up time of one second is well within the scope of the invention as Khatri has disclosed.

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- As per claim 5, Kim discloses a method wherein the external-clock storage device comprises a plurality of registers (50).
- As per claim 6, Kim discloses a circuit capable of adjusting the external clock of a CPU employed in a computer system (column 8, lines 20-22), comprising:

- A keyboard controller for setting an external-clock value of the CPU (58; column 8, lines 20-27, lines 35-39)
- An external-clock storage device coupled to the keyboard controller for storing the external-clock value (50; column 8, lines 20-40)
- A clock generator coupled to the external-clock storage device for providing the central processing unit with the external clock according to the external-clock value stored in the external-clock storage device (column 8, lines 40-46).

Kim fails to disclose a system wherein explicit mention is made to the south bridge circuit and its powering on the computer system after it has been powered up. Khatri teaches a circuit comprising:

- A south bridge circuit for starting an external-clock altering procedure, turning off and turning on the computer system (column 1, lines 35-41)
- A wake-up circuit coupled to the south bridge circuit for waking up the south bridge in a wake-up time after the turning off of the computer system (column 1, lines 35-41).
- As per claims 7-8, Kim discloses that the circuit comprising a computer system but does not specify what type of computer system. The examiner takes Official Notice that notebook computers and desktop computers are well-known types of computer system. Accordingly, it

would have been obvious to one of ordinary skill in the art at the time of invention to use a notebook computer or a desktop computer for the computer system disclosed by Kim.

- As per claim 9, Khatri does not address the exact wake-up time length. However, a wake-up time of one second is well within the scope of the invention as Khatri has disclosed.

- As per claim 10, Kim discloses a circuit where the external-clock storage device comprises a plurality of registers (50).

- As per claim 11, Khatri does not address the exact composition of the wake-up circuit. However, the circuit would inherently be made with resistors and capacitors.

- As per claim 12, Kim discloses an apparatus capable of adjusting the external clock of a CPU employed in a computer system (column 8, lines 20-22), comprising:

- An external-clock storage device for storing an external-clock value (50; column 8, lines 20-40);

- A clock generator coupled to the external-clock storage device for providing the central processing unit with the external clock (column 8, lines 40-46);

- Wherein when the external clock of the CPU is to be adjusted, the wake-up circuit starts as the computer system is being turned off (column 8, lines 41-43; It would be inherent that a circuit is needed to wake-up the system on a restart or a boot.);

- Wherein the clock generator provides the central processing unit with the external clock according to the external-clock value stored in the external-clock storage device after the south bridge circuit is waken up through the wake-up circuit (column 8, lines 40-46; The waking of the south bridge is the first step to powering the system as taught

below; therefore initializing system parameters would necessarily occur after this initial power up.).

Kim fails to disclose a system wherein explicit mention is made to the south bridge circuit and its powering on the computer system after it has been powered up. Khatri teaches a circuit comprising:

- A south bridge circuit (column 1, lines 35-41);
- A wake-up circuit coupled to the south bridge circuit for waking up the south bridge in a wake-up time after the turning off of the computer system when the external clock of the CPU is required to be adjusted (column 1, lines 35-41);
- The wake-up circuit generates a wake-up signal to wake up the south bridge circuit in the wake-up time after the turning off of the computer system (column 1, lines 35-41).
- As per claims 13-14, Kim discloses that the method is performed by a computer system but does not specify what type of computer system. The examiner takes Official Notice that notebook computers and desktop computers are well-known types of computer system. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention to use a notebook computer or a desktop computer for the computer system disclosed by Kim.
- As per claim 15, Khatri does not address the exact wake-up time length. However, a wake-up time of one second is well within the scope of the invention as Khatri has disclosed.
- As per claim 16, Kim discloses a method wherein the external-clock storage device comprises a plurality of registers (50).

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- As per claim 17, Khatri does not address the exact composition of the wake-up circuit.

However, the circuit would inherently be made with resistors and capacitors.

Response to Arguments

3. Applicant's arguments filed 1/18/2005 have been fully considered but they are not persuasive.

- Applicant's arguments with respect to claims 1 and 6 appear to argue that Khatri fails to disclose

“circuitry that includes: a south bridge circuit for starting an external-clock altering procedure, turning off and turning on the computer system; and

a wake-up circuit coupled to the south bridge circuit for waking up the south bridge circuit in a wake-up time after the turning off of the computer system”.

Examiner disagrees. Khatri is directed to a multi-peer bus computer environment.

Computer circuitry is inherent in this type of an environment, in that power management can only be accomplished thru the use of computer circuitry. Thus when Khatri discloses a south bridge, the south bridge must necessarily be composed of a circuit. Applicant's attention is directed to the Microsoft Computer Dictionary 5th edition where circuit is defined as “any path that can carry electrical current”.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Patel whose telephone number is (571) 272-7211. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ABP


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